

# Workshop on Active Targets and Time Projection Chambers for High-intensity and Heavy-ion beams in Nuclear Physics

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## An overview of the analysis software for S $\pi$ RIT experiments

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Measuring reaction fragments from radioactive heavy-ion collisions is crucial to study the nuclear symmetry energy in higher densities than the saturation density. To achieve the goal, developing the analysis software dedicated to the detector system is as important as constructing the detector.

SAMURAI Pion Reconstruction Ion-Tracker Time Projection Chamber (S $\pi$ RIT TPC) was constructed for measuring the reaction fragments and the first series of S $\pi$ RIT experiment was performed in Spring 2016 at RIBF-RIKEN. First, GETDecoder was developed to unpack the binary data from state-of-the-art GET electronics more efficiently. The dedicated analysis software, SpiRITROOT, has been developed by embedding the GET-Decoder. In this presentation, an overview of SpiRITROOT will be presented from binary data to the physical observables.

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